

PAPAIN

Prepared at the 15th JECFA (1971), published in NMRS 50B (1972) and in FNP 52 (1992). An ADI 'not limited' was established at the 15th JECFA (1971)

SYNONYMS

INS No.1101(ii)

SOURCES

Purified proteolytic substances derived from the fruit of *Carica papaya* (L) (Fam. *Caricaceae*).

Active principles

1. Papain (papaya peptidase I, cystein proteinase)
2. Chymopapain (cystein proteinase)

Systematic names and numbers

1. None (EC 3.4.22.2)
2. None (EC 3.4.22.6)

Reactions catalyzed

These enzymes hydrolyze polypeptides, amides and esters, especially at linkages involving basic amino acids, or leucine or glycine, yielding peptides of lower molecular weight.

DESCRIPTION

White to light tan amorphous powder or liquids; soluble in water, the solutions being colourless to light yellow and somewhat opalescent; practically insoluble in alcohol, chloroform and ether

FUNCTIONAL USES

Enzyme preparation
Used in the chillproofing of beer, tenderizing of meat, preparation of precooked cereals, and production of protein hydrolysates

GENERAL SPECIFICATIONS

Must conform to the *General Specifications for Enzyme Preparations used in Food Processing* (see Volume 1, Introduction)

CHARACTERISTICS

IDENTIFICATION

Papain activity (Vol. 4)

The sample shows plant proteolytic activity